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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/055,713

DATE: 06/26/2002

TIME: 09:55:36

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\06262002\J055713.raw

3 <110> APPLICANT: JAMIESON, Andrew
 4 LI, Guofu
 6 <120> TITLE OF INVENTION: ZINC FINGER PROTEINS FOR DNA BINDING AND GENE
 7 REGULATION IN PLANTS
 9 <130> FILE REFERENCE: 8325-0026 / S26-US1
 11 <140> CURRENT APPLICATION NUMBER: 10/055,713
 C--> 12 <141> CURRENT FILING DATE: 2002-06-17
 14 <150> PRIOR APPLICATION NUMBER: 60/263,445
 15 <151> PRIOR FILING DATE: 2001-01-22
 17 <150> PRIOR APPLICATION NUMBER: 60/290,716
 18 <151> PRIOR FILING DATE: 2001-05-11
 20 <160> NUMBER OF SEQ ID NOS: 105
 22 <170> SOFTWARE: PatentIn Ver. 2.0
 24 <210> SEQ ID NO: 1
 25 <211> LENGTH: 25
 26 <212> TYPE: PRT
 27 <213> ORGANISM: Artificial Sequence
 29 <220> FEATURE:
 30 <223> OTHER INFORMATION: Description of Artificial Sequence: C2H2 zinc finger domain
 32 <220> FEATURE:
 33 <221> NAME/KEY: SITE
 34 <222> LOCATION: (2)..(5)
 35 <223> OTHER INFORMATION: Xaa = any amino acid
 37 <220> FEATURE:
 38 <221> NAME/KEY: SITE
 39 <222> LOCATION: (4)..(5)
 40 <223> OTHER INFORMATION: where Xaa may be present or absent
 42 <220> FEATURE:
 43 <221> NAME/KEY: SITE
 44 <222> LOCATION: (7)..(18)
 45 <223> OTHER INFORMATION: Xaa = any amino acid
 47 <220> FEATURE:
 48 <221> NAME/KEY: SITE
 49 <222> LOCATION: (20)..(24)
 50 <223> OTHER INFORMATION: Xaa = any amino acid
 52 <220> FEATURE:
 53 <221> NAME/KEY: SITE
 54 <222> LOCATION: (23)..(24)
 55 <223> OTHER INFORMATION: where Xaa may be present or absent
 57 <400> SEQUENCE: 1
 W--> 58 Cys Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 59 1 5 10 15
 W--> 61 Xaa Xaa His Xaa Xaa Xaa Xaa Xaa His

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62          20          25
65 <210> SEQ ID NO: 2
66 <211> LENGTH: 9
67 <212> TYPE: DNA
68 <213> ORGANISM: Artificial Sequence
70 <220> FEATURE:
71 <223> OTHER INFORMATION: Description of Artificial Sequence: target sequence
73 <400> SEQUENCE: 2
74 ggcgtagac 9
76 <210> SEQ ID NO: 3
77 <211> LENGTH: 9
78 <212> TYPE: DNA
79 <213> ORGANISM: Artificial Sequence
81 <220> FEATURE:
82 <223> OTHER INFORMATION: Description of Artificial Sequence: target segment
84 <400> SEQUENCE: 3
85 ggcgacgta 9
87 <210> SEQ ID NO: 4
88 <211> LENGTH: 23
89 <212> TYPE: DNA
90 <213> ORGANISM: Artificial Sequence
92 <220> FEATURE:
93 <223> OTHER INFORMATION: Description of Artificial Sequence: target sequence for
94 2 linked ZFPs
96 <220> FEATURE:
97 <221> NAME/KEY: misc_feature
98 <222> LOCATION: (1)..(23)
99 <223> OTHER INFORMATION: n = a, c, g or t
101 <220> FEATURE:
102 <221> NAME/KEY: misc_feature
103 <222> LOCATION: (1)..(3)
104 <223> OTHER INFORMATION: 3rd finger of a 2nd ZFP
106 <220> FEATURE:
107 <221> NAME/KEY: misc_feature
108 <222> LOCATION: (4)..(6)
109 <223> OTHER INFORMATION: 2nd finger of a 2nd ZFP
111 <220> FEATURE:
112 <221> NAME/KEY: misc_feature
113 <222> LOCATION: (7)..(9)
114 <223> OTHER INFORMATION: 1st finger of a 2nd ZFP
116 <220> FEATURE:
117 <221> NAME/KEY: misc_feature
118 <222> LOCATION: (10)..(14)
119 <223> OTHER INFORMATION: n may be present or absent
121 <220> FEATURE:
122 <221> NAME/KEY: misc_feature
123 <222> LOCATION: (15)..(17)
124 <223> OTHER INFORMATION: 3rd finger of a 1st ZFP
126 <220> FEATURE:

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127 <221> NAME/KEY: misc_feature
 128 <222> LOCATION: (18)..(20)
 129 <223> OTHER INFORMATION: 2nd finger of a 1st ZFP
 131 <220> FEATURE:
 132 <221> NAME/KEY: misc_feature
 133 <222> LOCATION: (21)..(23)
 134 <223> OTHER INFORMATION: 1st finger of a 1st ZFP
 136 <400> SEQUENCE: 4
 137 nnnnnnnnnnnn nnnnnnnnnnnn nnn 23
 139 <210> SEQ ID NO: 5
 140 <211> LENGTH: 5
 141 <212> TYPE: PRT
 142 <213> ORGANISM: Artificial Sequence
 144 <220> FEATURE:
 145 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide ZFP linker
 147 <400> SEQUENCE: 5
 148 Thr Gly Glu Lys Pro
 149 1 5
 152 <210> SEQ ID NO: 6
 153 <211> LENGTH: 5
 154 <212> TYPE: PRT
 155 <213> ORGANISM: Artificial Sequence
 157 <220> FEATURE:
 158 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide ZFP linker
 160 <400> SEQUENCE: 6
 161 Gly Gly Gly Gly Ser
 162 1 5
 165 <210> SEQ ID NO: 7
 166 <211> LENGTH: 8
 167 <212> TYPE: PRT
 168 <213> ORGANISM: Artificial Sequence
 170 <220> FEATURE:
 171 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide ZFP linker
 173 <400> SEQUENCE: 7
 174 Gly Gly Arg Arg Gly Gly Gly Ser
 175 1 5
 178 <210> SEQ ID NO: 8
 179 <211> LENGTH: 9
 180 <212> TYPE: PRT
 181 <213> ORGANISM: Artificial Sequence
 183 <220> FEATURE:
 184 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide ZFP linker
 186 <400> SEQUENCE: 8
 187 Leu Arg Gln Arg Asp Gly Glu Arg Pro
 188 1 5
 191 <210> SEQ ID NO: 9
 192 <211> LENGTH: 12
 193 <212> TYPE: PRT
 194 <213> ORGANISM: Artificial Sequence

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196 <220> FEATURE:
197 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide ZFP linker
199 <400> SEQUENCE: 9
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201   1           5           10
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205 <211> LENGTH: 16
206 <212> TYPE: PRT
207 <213> ORGANISM: Artificial Sequence
209 <220> FEATURE:
210 <223> OTHER INFORMATION: Description of Artificial Sequence: peptide ZFP linker
212 <400> SEQUENCE: 10
213 Leu Arg Gln Lys Asp Gly Gly Gly Ser Gly Gly Gly Ser Glu Arg Pro
214   1           5           10           15
217 <210> SEQ ID NO: 11
218 <211> LENGTH: 28
219 <212> TYPE: PRT
220 <213> ORGANISM: Artificial Sequence
222 <220> FEATURE:
223 <223> OTHER INFORMATION: Description of Artificial Sequence: SP-1 consensus ZFP
224     recognition helix
226 <220> FEATURE:
227 <221> NAME/KEY: SITE
228 <222> LOCATION: (12)..(18)
229 <223> OTHER INFORMATION: Xaa = any amino acid
231 <400> SEQUENCE: 11
232 Tyr Lys Cys Pro Glu Cys Gly Lys Ser Phe Ser Xaa Xaa Xaa Xaa Xaa
233   1           5           10           15
234 --> 235 Xaa Xaa His Gln Arg Thr His Thr Gly Glu Lys Pro
236           20           25
239 <210> SEQ ID NO: 12
240 <211> LENGTH: 34
241 <212> TYPE: PRT
242 <213> ORGANISM: Artificial Sequence
244 <220> FEATURE:
245 <223> OTHER INFORMATION: Description of Artificial Sequence: backbone F1
247 <220> FEATURE:
248 <221> NAME/KEY: SITE
249 <222> LOCATION: (18)..(24)
250 <223> OTHER INFORMATION: Xaa = any amino acid
252 <400> SEQUENCE: 12
253 Lys Lys Lys Ser Lys Gly His Glu Cys Pro Ile Cys Phe Arg Val Phe
254   1           5           10           15
255 --> 256 Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa His Lys Arg Ser His Thr Gly Glu
257           20           25           30
259 Lys Pro
263 <210> SEQ ID NO: 13
264 <211> LENGTH: 28
265 <212> TYPE: PRT

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266 <213> ORGANISM: Artificial Sequence
 268 <220> FEATURE:
 269 <223> OTHER INFORMATION: Description of Artificial Sequence: backbone F2
 271 <220> FEATURE:
 272 <221> NAME/KEY: SITE
 273 <222> LOCATION: (12)..(18)
 274 <223> OTHER INFORMATION: Xaa = any amino acid
 276 <400> SEQUENCE: 13
 W--> 277 Tyr Lys Cys Thr Val Cys Gly Lys Ser Phe Ser Xaa Xaa Xaa Xaa Xaa
 278 1 5 10 15
 W--> 280 Xaa Xaa His Lys Arg Leu His Thr Gly Glu Lys Pro
 281 20 25
 284 <210> SEQ ID NO: 14
 285 <211> LENGTH: 23
 286 <212> TYPE: PRT
 287 <213> ORGANISM: Artificial Sequence
 289 <220> FEATURE:
 290 <223> OTHER INFORMATION: Description of Artificial Sequence: backbone F3
 292 <220> FEATURE:
 293 <221> NAME/KEY: SITE
 294 <222> LOCATION: (12)..(18)
 295 <223> OTHER INFORMATION: Xaa = any amino acid
 297 <400> SEQUENCE: 14
 W--> 298 Phe Ser Cys Asn Tyr Cys Gln Arg Lys Phe Tyr Xaa Xaa Xaa Xaa Xaa
 299 1 5 10 15
 W--> 301 Xaa Xaa His Val Arg Ile His
 302 20
 305 <210> SEQ ID NO: 15
 306 <211> LENGTH: 4
 307 <212> TYPE: PRT
 308 <213> ORGANISM: Artificial Sequence
 310 <220> FEATURE:
 311 <223> OTHER INFORMATION: Description of Artificial Sequence: modified F1
 313 <400> SEQUENCE: 15
 314 Gln Asn Lys Lys
 315 1
 318 <210> SEQ ID NO: 16
 319 <211> LENGTH: 5
 320 <212> TYPE: PRT
 321 <213> ORGANISM: Artificial Sequence
 323 <220> FEATURE:
 324 <223> OTHER INFORMATION: Description of Artificial Sequence: helix-capping sequence
 326 <220> FEATURE:
 327 <221> NAME/KEY: SITE
 328 <222> LOCATION: (4)
 329 <223> OTHER INFORMATION: Xaa = either Lys or Arg
 331 <220> FEATURE:
 332 <221> NAME/KEY: SITE
 333 <222> LOCATION: (5)

RAW SEQUENCE LISTING ERROR SUMMARY
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 2,3,4,5,7,8,9,10,11,12,13,14,15,16,17,18,20,21,22,23,24
Seq#:4; N Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
Seq#:11; Xaa Pos. 12,13,14,15,16,17,18
Seq#:12; Xaa Pos. 18,19,20,21,22,23,24
Seq#:13; Xaa Pos. 12,13,14,15,16,17,18
Seq#:14; Xaa Pos. 12,13,14,15,16,17,18
Seq#:16; Xaa Pos. 4,5
Seq#:17; Xaa Pos. 16,17,18,19,20,21,22
Seq#:18; Xaa Pos. 12,13,14,15,16,17,18
Seq#:19; Xaa Pos. 12,13,14,15,16,17,18
Seq#:20; N Pos. 25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44
Seq#:20; N Pos. 45
Seq#:21; N Pos. 25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44
Seq#:21; N Pos. 45
Seq#:22; N Pos. 28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47
Seq#:22; N Pos. 48